### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011150 Address: 333 Burma Road **Date Inspected:** 03-Jan-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

**CWI Name:** ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

**Bridge No:** 34-0006 **Component:** OBG

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

#### Bay #7

Traveler rail: - Caltrans QA inspector observed three ZPMC welders performed FCAW process on the flange to web plate of traveler rail #22TR3-001, 22TR3-004, 22TR4-004, 22TR2-001 and 22TR1-001. This 22TR type component has been changed design to all CJP weld along on both side of top and bottom flanges. All the welding areas have been pre-heating prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Traveler rail: - Caltrans QA Inspector observed four ZPMC grinders performed re-bevel grinding process on CJP joint of travelers. The surface of CJP bevels has been back gouged. The traveler rails ID are 22TR4-002, 22TR3-003 and 22TR1-002. The grinding process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Traveler rail: - Caltrans QA Inspector observed a ZPMC heat straightening operators performed heat straightening with ZPMC Heat Straightening Report (HSR) #HSR1 (B)-8051 on traveler rail. The traveler rails ID are 22TK2-001 and 22TR4-001. The heating temperature is maximum 650 C (1200 F) and cool in still air. Two traveler rails have been monitored and recorded by ZPMC and ABF QC Based on Caltrans QAI observation, no discrepancies were noted.

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Bay #5

Bike path: - Caltrans QA Inspector observed three welders performed FCAW process on CJP welds for exterior plates of bike path cantilever beam. The bike path cantilever beam ID is BK-001-048, BK-001-049 and BK-001-050. The bike path between the end plate and exterior plates of bike path cantilever beam has been changed use PJP weld in lieu of CJP weld but the weld joint remained with backing bar and the RFI file number is RFI # ABF-RFI-001933-R02. The FCAW welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Traveler rail: - Caltrans QA inspector observed two ZPMC welders performed FCAW build up weld metal (buttering) process on the web of traveler rails with CWR # B-CWR-982. The traveler rails ID are #10TR3-017, 11TR7-001 and 10TR3-014. The buttering size is along the edge of web with 10mm~20mm width. All of buttering areas have been pre heating prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Traveler rail: - Caltrans QA inspector observed two ZPMC welders performed FCAW noncritical repair weld process on the flange to web of traveler rail # 10TR6-001 and 11TR5-006. The repair areas are located at top and bottom flanges to web and total nine spots and length for 30mm to 350mm. All of repair areas have been pre heating prior FCAW repair welding. The FCAW repair process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

As notes within report above.





#### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

**Inspected By:** Pau,Wai Quality Assurance Inspector

**Reviewed By:** Clifford,William QA Reviewer